

POCKET Soarer

By **BENGT LUNDSTROM** . . . A nifty powered glider from Sweden, for single-channel R/C and an .020. Simple all-sheet balsa construction.

- The Pocket Soarer is a very small and easy to build motorized sailplane with good performance. The Jedelsky type airfoil works better than the usual Clark Y, and the tapered and swept forward planform gives built-in washout. With a model this size, the weight must be kept low, and the Ace Pulse Commander is recommended as it is still the lightest (and least expensive) radio gear.

Compared to the photos, the drawing has some simplified and improved details in the wing mounting and the fin.

BUILDING THE FUSELAGE

Make the two fuselage sides and the bulkheads. Glue the sides to bulkhead No. 3 and together at the tail. Then put in all the bulkheads and ribs behind bulkhead No. 3. Bend the sides together at the front. Put on the bottom sheets. The torque rod from the actuator is installed now.

Glue the two plywood wing fillets to the fuselage and then epoxy the piano wires for the wing to bulkheads 3 and 4. Note the dihedral angle.

Now put on the top fuselage sheeting, the fin, and make the hatch. Bulkhead No. 2 slides in to keep the receiver from interfering with the actuator.

BUILDING THE WING

Make 24 wing ribs, all alike. Pin the ribs to the drawing with the front 5x65mm block glued in place. Choose lightweight balsa for this block! Then put on the rear sheet and cut away the protruding parts of the ribs. Form the upper part of the airfoil. Glue the plywood root ribs in place and add the aluminum tubes for the wing wires.

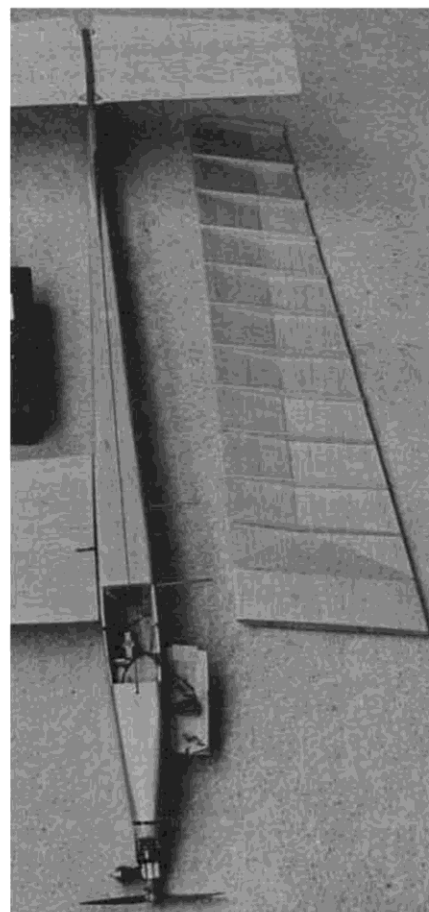
FINISHING

After sanding, give the whole model 2 or 3 coats of light dope. Do not apply heavy paint, particularly at the tail, which must be kept light. Give the fuselage nose a fuel-proof coating.

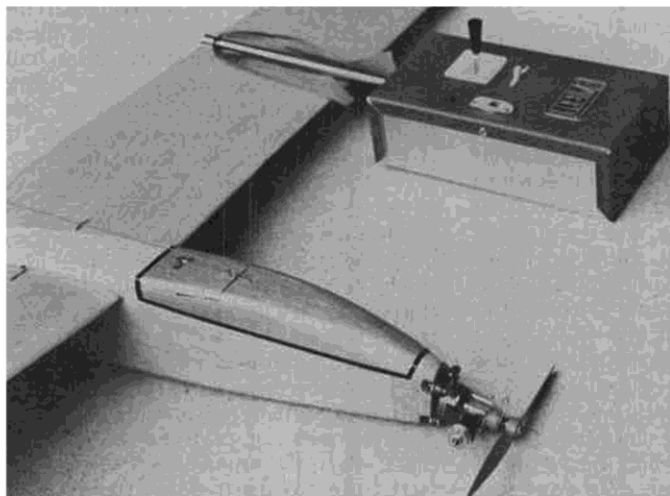
FLYING

If the CG is out of the recommended range, adjust with lead. Make hand glides. If the model stalls, raise the i.e. of the stabilizer with a piece of 3/32 balsa. If it dives or glides too fast, raise the t.e. Then start the engine and fly.

Always keep the plane upwind! A sailplane of this size is hard to see and flies slowly. If you lose it downwind it is very difficult to fly it back to you. Good luck!



Radio switch is mounted in hatch. First bay at wing root is completely sheeted for strength.



Pee Wee .020 has lots of down thrust to prevent looping. Some builders might want to add an extra tank for longer engine runs.



The author getting ready for a flight. Swept-forward wing and T-tail add a distinctive appearance to the little bird.